

within, but fully as many fell inward. In one case the four walls bulged outward, and the roof lay within about half way down to the floor of the second story, while not far off roofs had been lifted high into the air and carried a block and a half away before being deposited in an alley.

In all, several hundred houses were unroofed or otherwise badly wrecked. The money loss has been estimated at \$200,000.

ILLNESS OF PROF. ALFRED J. HENRY.

The students of the daily weather map were quite puzzled on October 7 to find that Professor Garriott had succeeded Professor Henry as forecaster for the month of October. Inquiry revealed the fact that in consequence of a sudden affliction of the eyes Professor Henry had been taken to the University Hospital for treatment for "displacement or falling of the retina of the left eye." We are happy to add that he is improving and that there is good reason to believe that he will return to duty in a month or six weeks.—C. A.

NOTES UPON ECONOMICAL SHAPES FOR CUTTING ENVELOPES OF BALLOONS.

Referring to Professor Marvin's article under the above heading in the MONTHLY WEATHER REVIEW for July, 1903, a casual examination of fig. 4, page 315, might lead one to assume that the outline of the end gores of a 15-gore field of the "baseball" type is determined by a circle having for its center the projection of one of the poles p_1, p_2, p_3, p_4 , and for its radius half the length of one of the central gores. The point of projection of these poles is at the center of the third gore from the end of the field.

THE WEATHER OF THE MONTH.

By MR. W. B. STOCKMAN, District Forecaster, in charge of Division of Meteorological Records.

PRESSURE.

The distribution of mean atmospheric pressure is graphically shown on Chart IV and the average values and departures from normal are shown in Tables I and VI.

The mean barometric pressure was high over the eastern half of the country and on the north Pacific coast, with the highest reading 30.05 inches in southwestern Washington. The readings were low over the middle and southern Plateau regions, with a minimum mean of 29.72 inches at Yuma.

The mean pressure was above the normal in New England, the eastern parts of Pennsylvania and New York, western Kentucky, southern Tennessee, parts of the Gulf States, lower Missouri and upper Mississippi valleys, parts of the northern and middle slope regions, eastern North Dakota, northwestern part of the upper Lake region, and on the immediate coast of Washington, Oregon, and northern California; elsewhere the mean pressure was below the normal.

The pressure diminished from that of July, 1903, in the Pacific States, the Plateau regions generally, the Gulf and South Atlantic States, central Mississippi Valley, and the Ohio Valley and Tennessee.

TEMPERATURE OF THE AIR.

The distribution of maximum, minimum, and average surface temperatures is graphically shown by the lines on Chart VI.

The mean temperature was above the normal in the middle Plateau and slope regions, generally over the southern half of the country, excepting on the Pacific coast and in portions of southeastern Texas. Over North Carolina, southeastern Tennessee, northwestern Texas, New Mexico, eastern Arizona, north-central Utah, and north-central Colorado the departures averaged between $+2.0^\circ$ and $+3.5^\circ$ per day. As a rule the departures in the region where the temperature was below the mean were more marked than the plus departures, averaging

A little consideration will show, however, that such a determination of the outline would not be correct, since the adjacent edges of any two gores must be of equal length, and this length, in degrees of a great circle, is $90^\circ - b$, where

$$\sin b = \sqrt{(\sin 45^\circ)^2 + (\sin 45^\circ \tan a)^2},$$

and a is the distance in degrees from the pole to the point through which the length of any meridian of the gore is to be measured.

The data for the lengths of the edges and central meridians of the gores that fall outside the poles in a 15-gore field is as follows:

(a). Distance from pole.	$90^\circ - b$.	Length of gore in percentage of length of central gore.
0	0	0
9	44 17	98.4
18	41 58	93.3
27	37 29	83.3
36	29 0.7	64.5
45	0 0	0.0

H. H. K.

CORRIGENDA.

In the MONTHLY WEATHER REVIEW for July, 1903, p. 316, column 2, line 16, make $\frac{14.007\pi^2 R^2}{10}$ read " $14.047\pi R$."

On the same page in fig. 7, for " $80^\circ 24' 10''$ " read " $83^\circ 24' 10''$," and for " $89^\circ 7' 36''$ " read " $87^\circ 7' 36''$."

from -2.0° to -6.4° per day from Montana, South Dakota, and Nebraska eastward to the Atlantic Ocean. The greatest deficiencies in temperature were reported from New England, eastern New York, and about western Lake Superior.

The average temperatures for the several geographic districts and the departures from the normal values are shown in the following table:

Average temperatures and departures from normal.

Districts.	Number of stations.	Average tempera- tures for the current month.	Departures for the current month.	Accum- ulated departures since January 1.	Average departures since January 1.
New England	8	62.4	- 4.4	+ 4.4	+ 0.6
Middle Atlantic	12	70.9	- 2.4	+ 7.8	+ 1.0
South Atlantic	10	79.6	+ 1.7	+ 4.7	+ 0.6
Florida Peninsula *	8	82.9	+ 1.5	+ 6.0	+ 0.8
East Gulf	9	81.0	+ 1.5	- 6.7	- 0.8
West Gulf	7	80.9	- 0.3	-10.2	- 1.3
Ohio Valley and Tennessee	11	75.4	+ 0.5	+ 3.2	+ 0.4
Lower Lake	8	66.8	- 2.6	+ 7.7	+ 1.0
Upper Lake	10	63.0	- 3.0	+10.9	+ 1.4
North Dakota *	8	63.9	- 2.5	+ 2.0	+ 0.2
Upper Mississippi Valley	11	71.0	- 1.7	+ 5.0	+ 0.6
Missouri Valley	11	71.8	- 1.2	+ 1.9	+ 0.2
Northern Slope	7	67.5	- 0.3	- 1.1	- 0.1
Middle Slope	6	75.5	+ 0.9	- 4.9	- 0.6
Southern Slope *	6	80.3	+ 1.6	- 9.0	- 1.1
Southern Plateau *	13	77.4	+ 0.7	-11.3	- 1.4
Middle Plateau *	8	69.9	- 0.4	-20.6	- 2.6
Northern Plateau *	12	67.4	- 0.4	+ 1.7	+ 0.2
North Pacific	7	60.8	- 0.6	- 3.5	- 0.4
Middle Pacific	5	63.4	- 1.3	- 8.6	- 1.1
South Pacific	4	70.9	- 0.6	- 5.5	- 0.7

* Regular Weather Bureau and selected voluntary stations.

In Canada.—Prof. R. F. Stupart says:

The temperature was below the average throughout the Dominion from the Pacific to the Atlantic oceans. The largest negative departures, amounting to from 3° to 6° , were recorded in Ontario and Quebec. In the Maritime Provinces they were from 3° to 4° below, British Columbia and the Northwest Territories from 2° to 4° below, and in Manitoba, Lake Superior, and the northern portions of Ontario from 1° to 2° below.